AUTHOR INDEX

Allen, C. Frank. Historical Sketch of the Society 79
Archibald, R. C. History of Mathematics 246
Babbitt, H. E. Inspection Trips 778
Badger, W. L. Some Phases of the History of Chemical Engineering.... 691
Barton, Wm. H. Practical English Course for Senior Engineers..... 604
Baxter, R. A. Training Engineers for the Mineral Industries 562
Berry, W. J. Analytic Geometry for Students of Engineering 393
Boardman, H. S. Whither Are We Traveling? 4
Boomsliter, G. P. Relationship Between Class Work in Strength of Materials and the Material Testing Laboratory 126
Bridgman, Donald S. Earnings of Land Grant College Alumni and Former Students 175
Engineering Graduates of Land Grant Colleges and Universities 861
Brooke, Wm. E. College Algebra for Students of Engineering 387
Brown, E. H. Selection of Design Engineers 423
Clark, J. C. Study of Eleven Representative American Electrical Engineering Courses 543
Cleary, S. F. Correction of Maladjustment to Grounding Courses in Engineering Drawing 840
Cooley, M. E. What Has Science Done for the World in Thirty Years?.. 445
Daggett, D. H. Present Status of Engineering Registration 869
Elliott, E. C. Address of Welcome 27
Eshbach, O. W. Progress in Recent Years in the Management of Men... 647
Evans, H. S. Corvallis, 1932 637
The Year Ahead 3
Graham, J. W. Practical English Course for Senior Engineers 604
Grant, E. L. The Business Side of Engineering 655
Groat, B. F. Fundamental Error in the Theory of Viscosity 379
Hall, A. V. English as an Essential Part of the Engineering Curriculum. 417
Hall, J. A. College Training of Engineering Students for Work in Machine Design 318
Hammond, H. P. Report on Summer Schools for Teachers of Engineering 39
The 1932 Sessions 740
Hedrick, E. R. Teaching of Trigonometry for Engineers 299
Holcomb, G. W., and Rogers, H. S. Inventory of Engineering Motives.. 851
Howe, J. W. Technical Education and the Business Depression 426
Huntington, E. V. Teaching the Calculus 485
Ives, H. E. Some Aspects of Research in Applied Physics 82
Jackson, D. C. Function of Research in Engineering Education..... 348
Jackson, D. C., Jr. Some Advantages of Co-operative Engineering Education 135
John, W. C. Study of 1930–31 Engineering Enrollments 50
Kartak, F. A. Case Problems in Engineering Education 565
Kempton, E. W. Co-operative Training in the Wire Industry 688
Kimball, D. S. Proposed Course in Administrative Engineering 165
Langenheim, R. L. Co-operative Education at the University of Tulsa... 526
Larkin, F. V. First Two Years *vs.* Last Two Years in Engineering Schools 469

Lewis, W. K. Place of Unit Operation in a Chemical Engineering Curriculum 596
Lytle, C. W. Collegiate Courses for Management 806
Mason, M. S., and Umhoefer, J. A. Salaries of Electrical Engineering Graduates 723
McNown, W. C. Curricula Flexibility 580
Miller, J. M. Visual Education Experiments Give Tangible Results..... 721
Moss, S. A. Symbols Standardization 371
Park, C. W. Some Attainable Objectives of Co-operative Education.... 327
Parker, J. W. Need of Speech Training for Engineers 226
A Challenge 719
Potter, A. A. Classification of Purdue Engineering Alumni 241
Co-operative Engineering Research 90
Robb, R. E. Place of Work Schedule in a Co-operative Engineering Program 413
Robinson, M. B. Co-operative Employment as a Company Asset..... 675
Rogers, H. S., and Holcomb, G. W. Inventory of Engineering Motives.. 851
Ross, David E. Research in Industry 239
Sackett, R. L. Alumni Should Know 347
Saville, T. Sanitary Engineering and Research at the University of North Carolina 311
Seulberger, F. G. Co-operative Education and the Business Depression.. 611
Slichter, C. S. Self-Training of the Teacher 110
Smith, Elliott D., and Wickenden, W. E. Engineers, Managers and Engineering Education 846
Umhoefer, J. A., and M. A. Mason. Salaries of Electrical Engineering Graduates 723
Walters, J. E. Classification of Purdue Engineering Alumni 241
White, A. E. Administration of Engineering Research Activities 98
Wickenden, W. E., and Smith, Elliott, D. Engineers, Managers and Engineering Education 846
Wildes, K. L. Co-ordination Between College Work and Industry 660
Wiley, R. B. Grades and Minimum Essentials 357
Wooster, L. F. Oregon State College 437
Oregon State College, School of Engineering 639
Higher Education in Oregon 802
Wykoff, G. S. Culture and Engineering English 522
Young, J. W. Adjustment Between Secondary School and College Work in Mathematics 586

TITLE INDEX

Address of Welcome. Edward C. Elliott 27
Adjustment Between Secondary Schools and College Work in Mathematics. J. W. Young 586
Administration of Engineering Research Activities. A. E. White..... 98
Alumni Should Know. R. L. Sackett 347
Analytic Geometry for Students of Engineering. W. J. Berry 393
Business Side of Engineering. E. L. Grant 655
Case Problems in Engineering Education. F. A. Kartak 565
Challenge. J. W. Parker 719
Chemical Engineering, Some Phases of History of. W. L. Badger 691
Classification of Purdue Engineering Alumni. A. A. Potter and J. E. Walters 241
College Algebra for Students of Engineering. W. E. Brooke 387
College Training of Engineering Students for Work in Machine Design. J. A. Hall 318
Collegiate Courses for Management. C. W. Lytle 806
Co-operative Education, Some Attainable Objectives of. C. W. Park.... 327
Co-operative Education at the University of Tulsa. R. L. Langenheim... 526
Co-operative Education and the Business Depression. F. G. Seulberger.. 611
Co-operative Employment as a Company Asset. M. B. Robinson..... 675
Co-operative Engineering Education, Some Advantages of. J. C. Jackson, Jr. 135
Co-operative Engineering Program, Place of the Work Schedule in a. R. E. Robb 413
Co-operative Engineering Research. A. A. Potter 90
Co-operative Training in the Wire Industry. E. W. Kempton 688
Co-ordination Between College Work and Industry. K. L. Wildes 660
Correction of Maladjustment to Grounding Courses in Engineering Drawing. S. F. Cleary 840
Corvallis. H. S. Evans 637
Culture and Engineering English. G. S. Wykoff 522
Curricula Flexibility. W. C. McNown 580
Earnings of Land Grant College Alumni and Former Students. D. S. Bridgman 175
Education and the Industrial Depression, Technical. J. W. Howe 426
Engineering Graduates of Land Grant Colleges and Universities. D. S. Bridgman 861
Engineers, Managers and Engineering Education. W. E. Wickenden and Elliott D. Smith 846
English as an Essential Part of the Engineering Curriculum. A. V. Hall 417
Enrollments, Study of 1930–31 Engineering. W. C. John 50
First Two Years *vs.* Last Two Years in Engineering Schools. F. V. Larkin 469
Grades and Minimum Essentials. R. B. Wiley 357
Higher Education in Oregon. L. F. Wooster 802
Historical Sketch of the Society. C. Frank Allen 79
Inspection Trips. H. E. Babbitt 778
Inventory of Engineering Motives. H. S. Rogers and G. W. Holcomb... 851
Mathematics, History of. R. C. Archibald 246

Necrology:
Hartman, F. M. 797
Hoffman, A. H. 76
Hutchinson, F. L. 795
Landreth, O. H. 797
Mees, C. L. .....
Orton, Edward, Jr. 796
Smith, J. H. 797
Swain, G. F. 137
Votey, J. W. 232
Oregon State College. L. F. Wooster 437
Oregon State College, School of Engineering. L. F. Wooster 639
Physics, Some Aspects of Research in Applied. H. E. Ives 82
Plan of Unit Operation in a Chemical Engineering Curriculum. W. K. Lewis 596
Practical English Course for Senior Engineers. J. W. Graham and W. H. Barton 604
Present Status of Engineering Registration. P. H. Daggett 869
Progress in Recent Years in Teaching the Management of Men. O. W. Eshbach 647
Proposed Course in Administrative Engineering. D. S. Kimball 165
Relationship Between Class Work in Strength of Materials and the Materials Testing Laboratory. G. P. Boomsliter 126
Research in Engineering Education, Function of. D. C. Jackson 348
Research in Industry. David E. Ross 239
Salaries of Electrical Engineering Graduates. M. S. Mason and J. A. Umhoefer 723
Sanitary Engineering and Research at the University of North Carolina. Thorndike Saville 311
Selection of Design Engineers. E. H. Brown 423
Self-Training of the Teacher. C. S. Slichter 110
Speech Training for Engineers, The Need of. J. W. Parker 226
Study of Eleven Representative American Electrical Engineering Courses. J. C. Clark 543
Symbols Standardization. S. A. Moss 371
Teaching the Calculus. E. V. Huntington 485
Training Engineers for Mineral Industries. R. A. Baxter 562
Trigonometry for Engineers, Teaching of. E. R. Hedrick 299
Visual Education Experiments Give Tangible Results. J. M. Miller 721
Viscosity, Fundamental Error in Theory of. B. F. Groat 379
What Has Science Done for the World in Thirty Years? M. E. Cooley 445
Whither Are We Traveling? H. S. Boardman 4
Year Ahead, The. H. S. Evans 3

SUBJECT INDEX

Administrative engineering. *See* Engineering *under* Education.
Admission. *See* Entrance requirements.
Algebra.
  Course content 387
  Teaching problems 390
Alumni should know 347
  Purdue 241
  Salaries.
    Electrical engineers 723
    Eta Kappa Nu survey 723
    Land Grant Colleges 175, 861
Authors. *See* Books and authors.
Books and authors 614, 787
Business schools. *See* Teaching *under* Industrial management.
Calculus 485
Challenge 719
Chemical Engineering.
  Curricula 596
  History. *See* History.
Classifying engineering colleges. *See* Report 198
College Training.
  Machine design 318
College Work.
  Co-ordination with industry 660
Co-ordination. *See* College work.
Co-operative engineering education.
  Advantages 135
  Attainable objectives 327
  Business depression 611
  Company asset 675
  Research 90
  Tulsa University 526
  Wire industry 688
  Work schedule 413
Cornell University. *See* Administrative engineering.
Curriculum.
  Business schools 812
  Chemical engineering 596
  English 416
  First two years *vs.* last two years 469
  Flexibility 580
  Industrial engineering 825
Drawing 63, 134, 229, 346, 436, 528, 613, 715, 798, 840, 877
Earnings. *See* Salaries *under* Alumni.
Economics. Summer school 740
Education.
  Engineering. Administrative 165
    Case problems 565

Economics 655
History. *See* History.
Industrial engineering 806, 846
Protection 27
Trends 31
Industrial depression 426
Oregon.
Higher education 802
Electrical engineering.
Salaries 723
Survey 543
Engineers.
Design 423
Licensing 869
English language.
Culture and engineering 522
Curriculum 417
Public speaking 227
Report of conference 68
Senior engineers 604
Summer school 719, 741
Enrollment.
1930–31 50
Entrance requirements 448
Eta Kappa Nu. *See* Salaries *under* Alumni.
Geometry.
Analytic 393
Course content 393
Three dimensions 401
Teaching problems 406
Grading students 357
Graduates.
Electrical engineering 723
Land Grant Colleges 861
Placing 62, 723
Salaries 723
History.
Chemical engineering 691
Engineering education 4
Mathematics 246
Before 1600 A.D. 247
After 1600 A.D. 248
Before 17th century 249
After 17th century 271
18th century 282
19th century and later 286
Literature list 293
Income. *See* Salaries *under* Alumni.
Industrial engineering. *See* Engineering *under* Education.
Industrial management.
Instruction 647, 806, 846
Teaching.
Business schools *vs.* engineering schools 806

Industry.
Co-ordination 660
Fundamentals 537
Inspection trips 778
Junior colleges.
Articulation 218
Report 214
Terminal courses 216
Lamme medal 1, 34
Land Grant Colleges.
Engineering graduates.
Distribution 861
Salaries 175
Machine design.
Clearing house 64, 133, 607, 877
College training 318
Management. *See* Industrial management.
Managers. *See* Instruction *under* Industrial management.
Materials testing.
Class work 126
Combined *vs.* separate courses 130
Mathematics.
Algebra 387
Calculus 485
Geometry 393
History 246
Instruction. *See* Teaching.
Teaching 307
Secondary schools 586
Trigonometry 299
Mechanics.
Program 123
Report 122
Michigan, University of.
Research 100
Mineral industries.
Training engineers 562
Motion pictures. *See* Visual education.
Motivation.
Engineering students 851
Necrology 76, 137, 232, 795, 796, 797, 882
North Carolina, University of.
Sanitary engineering 311
Obituary. *See* Necrology.
Oregon.
Higher education 802
School of engineering 639
State college 437
Pedagogy. *See* Teaching.
Personnel. *See* Report *under* S. P. E. E.
Physics. *See* Applied physics *under* Research.
Presidential address.
Whither are we traveling? 4
Public speaking. *See* English language.

Purdue University.
Alumni 241
Grades 356
Registration of engineers. *See* Licensing *under* Engineers.
Remuneration. *See* Salaries *under* Alumni.
Research.
Administration 98
Applied physics 82
Co-operative engineering 90
Function 348
Industry 239
Michigan, University of 98
North Carolina, University of 311
Secondary schools.
Adjustments 586
Society for the Promotion of Engineering Education.
Corvallis meeting 637
History 79
Reports.
Classifying engineering colleges 198
Junior colleges 214
Personnel methods 746
Placing graduates 668
Secretary, 1930–31 31
Summer schools 39
See also Summer schools for teachers of engineering.
Standardization.
Symbols 371
Strength of materials.
Class work 126
Laboratory 126
Students.
Orientation 462
Summer schools for teachers of engineering 34
Accomplishments 45
Establishment 39
Programs 42
Report 39
Sessions 41, 443, 740
Symbols 371
Teacher. *See* Teaching.
Teaching.
Algebra 390
Calculus 485
Geometry 406
Machine design 318
Management 647
Mathematics 307
Methods 307
Mineral industries 562
Public speaking 226
Self-instruction 110
Trigonometry 299
Testing materials 126

Training.
Public speaking 226
Self 110
Mineral industries 562
Trigonometry. *See* Teaching.
Vocational guidance. *See* Motivation.
Viscosity.
Fundamental error in 379
Visual education 721